This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.





UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/811,011	03/15/2001	Ulhas S. Warrier	42390P10851	8561	
8791	7590 07/13/2004		EXAM	INER	
BLAKELY SOKOLOFF TAYLOR & ZAFMAN			DENNISON, JERRY B		
	O WILSHIRE BOULEVARD, SEVENTH FLOOR ANGELES, CA 90025		, ART UNIT	ART UNIT PAPER NUMBER	
			2143		

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

			`/			
	Application No.	Applicant(s)				
	09/811,011	WARRIER ET AL.				
Office Action Summary	Examiner	Art Unit				
	J. Bret Dennison	2143				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the d	correspondence address	S			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tir y within the statutory minimum of thirty (30) day vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed /s will be considered timely. the mailing date of this commun (D) (35 U.S.C. § 133).	ication.			
Status						
1) Responsive to communication(s) filed on 15 M	Responsive to communication(s) filed on <u>15 March 2001</u> .					
2a) ☐ This action is FINAL . 2b) ☑ This	This action is FINAL . 2b)⊠ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) ☐ Claim(s) <u>1-37</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) <u>1-37</u> is/are rejected.						
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine						
10)⊠ The drawing(s) filed on <u>15 March 2001</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicat rity documents have been receive u (PCT Rule 17.2(a)).	ion No ed in this National Stag	e			
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:)			

DETAILED ACTION

This Action is in response to Application Number 09811011 received on 15
 March 2001.

2. Claims 1-37 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1- are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al. (U.S. Patent Number 6,381,646) in view of Molitor (U.S. Patent Number 6,661,799).

3. Regarding claim 1, Zhang discloses a method comprising a first machine communicating with a second machine using a protocol that sends the first machine's network configuration data in an application data sent to the second machine (Zhang, col. 1, lines 15-55, Zhang teaches using a Point-to-Point protocol wherein a negotiation takes place to configure the network layer, making it inherent that a machine sends its network configuration data in order to come to a negotiation);

Art Unit: 2143

Zhang also teaches making connections through a network address translator so as to apparently originate from the address translator without breaking the protocol (Zhang, col. 4, lines 47-62).

However, Zhang does not teach receiving from a network configuration server a network configuration not subject to translation by the translating access point; and providing according to the protocol said received network configuration to the second machine so that said communicating may traverse a translating access point.

In an analogous art of using network address translators to facilitate peer-to-peer application communication, Molitor teaches a system which allows applications to request a NAT rule from an external server in the public Global Internet which would then provide the configuration of a private network and allow the application to make a connection to it (Molitor, col. 9, lines 40-47).

Therefore, it would have been obvious to on in the ordinary skill in the art at the time of the invention to combine Zhang with Molitor in order to allow applications to request information concerning address translations to be performed, so those applications may send useful information to other applications for the purpose of allowing applications to communicate through the NAT device in the absence of defined rules for specific channels of communication (Molitor, see Abstract and Zhang, col. 3, lines 22-37).

4. Regarding claim 2, Zhang and Molitor teach the limitations, substantially as claimed, as described in claim 1, including wherein the network configuration data comprises a network address, the method further comprising:

Art Unit: 2143

establishing a tunnel with the first machine for receiving network traffic sent to the network address (Zhang, col. 5, lines 20-27).

- 5. Regarding claim 3, Zhang and Molitor teach the limitations, substantially as claimed, as described in claim 2, including wherein the tunnel is established between the network configuration server and the first machine (Zhang, col. 5, lines 1-5).
- 6. Regarding claim 4, Zhang and Molitor teach the limitations, substantially as claimed, as described in claim 1, including wherein the protocol is used for communication (Zhang, col. 6, lines 35-45). Molitor also discloses facilitating communication (Molitor, col. 4, lines 54-55) through applications such as Telephony (Molitor, col. 5, lines 40-43).
- 7. Regarding claim 5, Zhang and Molitor teach the limitations, substantially as claimed, as described in claim 1, including wherein the translating access point has a first interface communicatively coupled with a first network, and a second interface communicatively coupled with a second network, the method further comprising:

associating a network address with the second interface (Zhang, col. 5, lines 30-45 and 55-56);

receiving network traffic from the first machine on the first interface (Zhang, col. 5, lines 40-51); and

translating said received network traffic so that it appears to originate from the

Art Unit: 2143

network address associated with the second interface (Zhang, col. 5, lines 40-51).

8. Regarding claims 6, 17, and 18, Zhang and Molitor disclose a method for communicating through an access point coupling plural machines on a first network to a second machine on a second network by translating first network traffic so as to apparently originate from the access point, comprising:

receiving a request for a first address of a first machine on the first network (Molitor, col. 9, lines 40-41);

allocating a second address from a server on the second network (Zhang, col. 5, lines 30-35);

providing the second network address in response to the request (Molitor, col. 9, lines 41-47);

transmitting through the access point at least one network packet comprising a packet origin, and a data payload comprising the second network address; and translating by the access point of the packet origin so that the network packet apparently originates from the access point (Zhang, col. 5, lines 40-51).

9. Regarding claim 7, Zhang and Molitor teach the limitations, substantially as claimed, as described in claim 6, including:

establishing a tunnel between the first machine and the server (Zhang, col. 6, lines 20-30); and

Page 6

Application/Control Number: 09/811,011

Art Unit: 2143

the first machine receiving, through the tunnel, network traffic sent to the second address (Zhang, col. 6, lines 20-30).

- 10. Regarding claim 8, Zhang and Molitor teach the limitations, substantially as claimed, as described in claim 7, including wherein the access point performs selected ones of: network address translation, and port translation on the at least one network packet (Zhang, col. 5, lines 45-51).
- 11. Regarding claim 9, Zhang and Molitor teach the limitations, substantially as claimed, as described in claim 6, including:

providing a network address translation (NAT) based router between the first machine and the second machine so that communication between said first and second machines is NAT translated at least once (Zhang, col. 5, lines 40-50).

- 12. Regarding claim 10, Zhang and Molitor teach the limitations, substantially as claimed, as described in claim 9, including wherein the NAT based router is the access point (Zhang, col. 5, lines 40-50).
- 13. Regarding claim 11, Zhang and Molitor teach the limitations, substantially as claimed, as described in claim 6, including:

communicatively coupling the server to the second network such that network traffic from the server reaches the second network without translation (Molitor, col. 9, lines 40-46).

Art Unit: 2143

Page 7

- 14. Regarding claim 12, Zhang and Molitor teach the limitations, substantially as claimed, as described in claim 11, including wherein the second network is the Internet (Zhang, col. 4, lines 60-65).
- 15. Regarding claim 13, Zhang and Molitor teach the limitations, substantially as claimed, as described in claim 6, including wherein the packet origin address is the first network address (Zhang, col. 5, lines 30-40).
- 16. Regarding claim 14, Zhang and Molitor teach the limitations, substantially as claimed, as described in claim 6, including:

executing a networking application program, said program issuing the request for the first address of the first machine, and storing said provided second address as the data payload (Zhang, col. 5, lines 30-35, Zhang teaches establishing a session with a second address, where it is inherent that the address is stored); wherein the networking application program is unaware of said translating (Zhang, col. 5, lines 40-50).

17. Regarding claim 15, Zhang and Molitor teach the limitations, substantially as claimed, as described in claim 6, including wherein the first machine comprises:

a network interface communicatively coupled to the first network (Zhang, col. 5, lines 55-56);

Art Unit: 2143

a first memory for storing an operating system providing network services (Molitor, Fig 3, 110); and

a second memory for storing a network driver communicatively coupling the network interface to said network services, said network driver performing said allocating the second address, and providing the second address responsive to the request for the first address (Zhang, col. 5, lines 35-50).

18. Regarding claim 16, Zhang and Molitor teach the limitations, substantially as claimed, as described in claim 15, including:

executing a networking application program which issues the request for the first address (Molitor, col. 9, lines 39-41); and

the network driver providing the second network address responsive to said networking application program request (Molitor, col. 9, lines 42-46).

19. Regarding claim 19, Zhang and Molitor teach the limitations, substantially as claimed, as described in claim 18, including facilitating communication (Molitor, col. 4, lines 54-55) through applications such as Telephony (Molitor, col. 5, lines 40-43) and connecting to an external server for a network configuration. However, Zhang and Molitor do not explicitly state notifying the network driver of success/failure of said establishing; and notifying said program of said success/failure.

Art Unit: 2143

It would have been obvious to one in the ordinary skill in the art at the time of the invention to incorporate notifying of success/failure in order to present the status of the request made by the application.

20. Regarding claim 20, Zhang and Molitor teach the limitations, substantially as claimed, as described in claim 19, including wherein:

the application program telecommunicates with the network driver; and the endpoint telecommunicates with the server (Molitor, col. 5, lines 40-43, Molitor teaches facilitating communication through Telephony).

21. Regarding claim 21, Molitor discloses a method for a first machine on an local area network (LAN) to communicate with a wide area network (WAN) through an access point configured to alter LAN network traffic so that it appears to originate from the WAN, the method comprising providing a WAN address to said program so that said program can embed the WAN address within the network traffic data (Zhang, col. 30-50). However, Zhang does not disclose:

providing layer-based network services including an application layer, a network driver layer, and a session layer, wherein said driver is called before said session layer;

executing an application program configured to identify a first address of the first machine, embed said identified first address within network traffic data, and send said network traffic data to a communication endpoint; and

establishing a first communication session between said program and said driver,

Art Unit: 2143

a second communication session between said driver and the server, and a third communication session between the server and the said endpoint.

In an analogous art, Molitor teaches providing layer-based network services including an application layer, a network driver layer, and a session layer, wherein said driver is called before said session layer (Molitor, Fig. 3);

executing an application program configured to identify a first address of the first machine, embed said identified first address within network traffic data, and send said network traffic data to a communication endpoint (Molitor, col. 9, lines 39-41); and

establishing a first communication session between said program and said driver, a second communication session between said driver and the server, and a third communication session between the server and the said endpoint (Molitor, col. 9, lines 39-46, Molitor teaches connecting to an external server).

Therefore, it would have been obvious to on in the ordinary skill in the art at the time of the invention to combine Zhang with Molitor in order to allow applications to request information concerning address translations to be performed, so those applications may send useful information to other applications for the purpose of allowing applications to communicate through the NAT device in the absence of defined rules for specific channels of communication (Molitor, see Abstract and Zhang, col. 3, lines 22-37).

22. Regarding claim 22, Zhang and Molitor teach the limitations, substantially as claimed, as described in claim 21, including:

Art Unit: 2143

contacting a server on the WAN to obtain the WAN address (Molitor, col. 9, lines 39-43);

However, Molitor does not disclose receiving a call setup from said program for the endpoint', establishing a call from the server to the endpoint; connecting said program call to said driver; and transparently forwarding said program call by said driver to the server. It would have been obvious to one in the ordinary skill in the art at the time the invention was made that connecting to a server includes establishing a connection.

- 23. Regarding claim 23, Molitor teaches the limitations, substantially as claimed, as described in claim 21. However, Molitor does not explicitly state wherein the session layer comprises the Microsoft Winsock Application Programming Interface. It would have bee obvious to one in the ordinary skill in the art at the time of the invention that the session layer comprises the Microsoft Winsock API because it is used to create applications that access low-level functions of TCP/IP.
- 24. Regarding claim 24, Molitor teaches the limitations, substantially as claimed, as described in claim 21. However, Molitor does not explicitly state wherein said network services are arranged according to the ISO/OSI model. It would have bee obvious to one in the ordinary skill in the art at the time of the invention that said network services are arranged according to the ISO/OSI model because it is the standard model for networking protocols and distributed applications.

Application/Control Number: 09/811,011 Page 12

Art Unit: 2143

25. Claims 25-37 include an apparatus performing the method contained in claims 1-

24. Therefore claims 25-37 are rejected from the same art in the rejection of claims 1-

24.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Bret Dennison whose telephone number is (703)305-8756. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on (703)308-5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

J. Bret Dennison Patent Examiner Art Unit 2143

> SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100